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Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

Sub-Committee of Experts on the Transport of Dangerous Goods

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Item 8 of the provisional agenda
Cooperation with the International Atomic Energy Agency

Harmonization with the International Atomic Energy Agency Regulation for the Safe Transport of Radioactive Material

Transmitted by International Atomic Energy Agency (IAEA)*

Introduction

1. This document contains a draft list of amendments to the twentieth revised edition of the Recommendations on the Transport of Dangerous Goods, Model Regulations, for alignment with the 2018 Edition of the IAEA Regulations for the Safe Transport of Radioactive Material (SSR-6, Rev.1).

2. The draft amendments were prepared on the basis of those submitted to the IAEA Board of governors for approval.

3. Some editorial changes to the IAEA Regulations have not been reflected when they were likely to bring editorial inconsistencies in the Model Regulations. Furthermore, no attempt has been made to modify the current structure of the Model Regulations.

4. Paragraph numbers between square brackets refer to paragraphs in the 2018 Edition of the IAEA Regulations.

5. The draft amendments will also be shown in track-changes mode in an informal document.

* In accordance with the programme of work of the Sub-Committee for 2017–2018 approved by the Committee at its eighth session (see ST/SG/AC.10/C.3/100, para. 98 and ST/SG/AC.10/44, para. 14).

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6. With the 2018 Edition of SSR-6 some editorial changes have been made which are not detailed in this document, namely:

- "Marking/mark" replaced by "mark/marking", to be aligned with the Model Regulations;
- "Persons" replaced by "people", to be aligned with the GSR-Part 3, in 1.1.1.4, 1.5.1.1 and 7.1.8.5.1; paragraphs 1.5.1.2 and 1.5.2.5 are included in this document because there are additional changes to the paragraphs;
- "Risk/hazard" replaced by "hazard/risk" to be aligned with the Model Regulations;
- Furthermore, the definition of "radiation level" was deleted and replaced by "dose rate" (see definition of "dose rate" in 1.2.1);
- That means, in the whole text of the UN Model Regulations the old words have been replaced by the new words (editorial changes), but are only shown in this text, if the IAEA paragraphs have other changes in addition to these editorial ones.

Proposals of amendments

Recommendations on the transport of dangerous goods

In recommendation 18 "TRANSPORT OF RADIOACTIVE MATERIAL", at the end, replace ""International Basic Safety Standards for Protection against Ionizing Radiation and for the safety of Radiation Sources", Safety Series No. 115, IAEA, Vienna (1996)" by ""Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards, IAEA Safety Standards Series No. GSR Part 3, IAEA, Vienna (2014)"".

Chapter 1.2

1.2.1 Amend the definitions hereafter as follows:

Dose rate: Insert the following new definition, in alphabetical order:

Dose rate shall mean the ambient dose equivalent or the directional dose equivalent, as appropriate, per unit time, measured at the point of interest.

[IAEA 220A]

Freight container: In the first sentence replace "accordingly strong" by "is strong" and add "and" before "having fittings".

[IAEA 223]

Intermediate bulk container: In sub-paragraph (c) replace "in handling" by "during handling".

[IAEA 224]

Radiation level: Delete the entry.

Note: This paragraph was deleted and its content has been transferred to the new paragraph 220A "Dose rate".

[IAEA 233]

Transport index: In the first sentence after "SCO-I" add "or SCO-III".

[IAEA: 244]

Chapter 1.5

1.5.1.1 In the first sentence, replace "to persons" by "to people". Amend the second and third sentences to read "These Regulations are based on the IAEA "Regulations for the Safe Transport of Radioactive material, 2018 Edition, IAEA Safety Standards Series No. SSR–6, (Rev.1) IAEA, Vienna 2018). Explanatory material can be found in "Advisory Material for the IAEA Regulations for the Safe Transport of Radioactive Material (2018 Edition)", Safety Standard Series No. SSG-26, (Rev.1) IAEA Vienna (2019)."

[IAEA: 101]

1.5.1.2 In the first sentence, replace "persons" by "people" and replace "from the effects of radiation in the transport" by "from harmful effects of ionizing radiation during the transport of radioactive material".

In (b), replace "radiation levels" by "dose rate".

In the last sentence, replace "Finally" by "Thirdly" and add the following new sentence at the end: "Finally, further protection is provided by making arrangements for planning and preparing emergency response to protect people, property and the environment.".

[IAEA: 104]

1.5.1.5.1 In sub-paragraph (a) after "5.2.1.7," add "5.4.1.5.7.1 (f) (i) and (ii), 5.4.1.5.7.1 (i)," and after "7.1.8.3.1" add "7.1.8.4.3".

[IAEA: 515]

1.5.1.5.2 Delete the second sentence.

[IAEA: 515]

1.5.2.4 In the last sentence replace "individual monitoring or workplace monitoring" by "workplace monitoring or individual monitoring".

[IAEA: 303]

1.5.2.5 In the first sentence, replace "accidents or incidents" by "a nuclear or radiological emergency". Replace the second sentence by "*Consignors* and *carriers* shall establish, in advance, arrangements for preparedness and response in accordance with the national and/or international requirements and in a consistent and coordinated manner with the national and/or international emergency arrangements.".

[IAEA: 304]

1.5.2.6 Amend to read as follows:

"The arrangements for preparedness and response shall be based on the graded approach and take into consideration the identified hazards and their potential consequences, including the formation of other dangerous substances that may result from the reaction between the contents of a *consignment* and the environment in the event of a nuclear or radiological emergency. Guidance for the establishment of such arrangements is contained in "Preparedness and Response for a Nuclear or Radiological Emergency", IAEA Safety Standards Series No. GSR Part 7, IAEA, Vienna (2015); "Criteria for Use in Preparedness and Response for a Nuclear or Radiological Emergency", IAEA Safety Standards Series No. GSG-2, IAEA, Vienna (2011); "Arrangements for Preparedness for a Nuclear or Radiological Emergency", IAEA Safety Standards Series No. GS-G-2.1, IAEA, Vienna

(2007), and "Arrangements for the Termination of a Nuclear or Radiological Emergency", IAEA Safety Standards Series No. GSG-11, IAEA, Vienna [(in press)].".

[IAEA: 305]

1.5.4.2 In the second sentence, replace "through alternative means" by "through means alternative to the other provisions of these Regulations," and replace "for single or a planned series of multiple consignments" by "for a single *consignment* or a planned series of multiple *consignments*". In the third sentence, at the end, after "applicable requirements" add "in these Regulations".

[IAEA: 310]

1.5.6.1 In the introductory sentence, replace "radiation level" by "dose rate". In (b), at the beginning, replace "carrier, consignor or consignee" by "*consignor, carrier*, or *consignee*". In (b) (iii), replace "similar circumstances" by "the causes and circumstances similar to those". In (b) (iv), replace "on corrective or protective actions" by "the corrective or protective actions".

[IAEA: 309]

Chapter 2.7

2.7.2.1.1 Replace "2.7.2.4.2" by "2.7.2.4".

[IAEA: 401]

Table 2.7.2.1.1 For UN 2913, in the Proper shipping name, replace "SCO-I or SCO-II" by "SCO-I, SCO-II or SCO-III".

[IAEA: Table 1]

2.7.2.2.2 In (a), replace "the International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources, Safety Series No.115, IAEA, Vienna (1996)" by "Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards, IAEA Safety Standards Series No. GSR Part 3, IAEA, Vienna (2014)".

In (b), at the end, replace "the International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources, Safety Series No.115, IAEA, Vienna (1996)" by "GSR Part 3".

[IAEA: 403]

2.7.2.2.3 Replace "daughter nuclide" by "progeny nuclide" (twice). At the end, replace "daughter nuclides" by "progeny nuclides".

[IAEA: 404]

Table 2.7.2.2.1 Add the following rows in proper order

Ba-135m	2×10^{1}	6×10^{-1}	1×10^{2}	1×10^{6}
Ge-69	1×10^{0}	1×10^{0}	1×10^{1}	1×10^{6}
Ir-193m	4×10^{1}	4×10^{0}	1×10^{4}	1×10^{7}
Ni-57	6×10^{-1}	6×10^{-1}	1×10^{1}	1×10^{6}
Sr-83	1×10^{0}	1×10^{0}	1×10^{1}	1×10^{6}
Tb-149	8×10^{-1}	8×10^{-1}	1×10^{1}	1×10^{6}
Tb-161	3×10^{1}	7×10^{-1}	1×10^{3}	1×10^{6}

In table note (b), at the end of the introductory sentence, add "(the activity to be taken into account is that of the parent nuclide only). After "Th-nat" and "U-nat", insert a reference to footnote *. Footnote * reads: "* In the case of Th-natural, the parent nuclide is Th-232, in the case of U-natural the parent nuclide is U-238.".

[IAEA: 405]

2.7.2.3.1.2 In sub-paragraph (c) delete "that meet the requirements of 2.7.2.3.1.3,". Under sub-paragraph (c), delete sub-paragraph (ii) and renumber sub-paragraph (iii) as (ii).

[IAEA: 409]

2.7.2.3.1.3 Delete and add "2.7.2.3.1.3 *Deleted*".

[IAEA: 601]

2.7.2.3.2 In the introductory sentence before (a), replace "two" by "three". Add the following new sub-paragraph (c):

"(c) SCO-III: A large solid object which, because of its size, cannot be transported in a type of package described in these Regulations and for which:

(i) All openings are sealed to prevent release of radioactive material during conditions defined in 4.1.9.2.4.(e))

(ii) The inside of the object is as dry as practicable;

(iii) The non-fixed contamination on the external surfaces does not exceed the limits specified in 4.1.9.1.2.

The non-fixed contamination plus the fixed contamination on the inaccessible surface averaged over 300 cm^2 does not exceed 8×10^5 Bq/cm^2 for beta and gamma emitters and low toxicity alpha emitters, or 8×10^4 Bq/cm^2 for all other alpha emitters.".

[IAEA: 413]

2.7.2.3.3.5 (b) After "a free drop of 1.4 kg", replace "through 1 m" by "from a height of 1 m".

[IAEA: 706]

2.7.2.3.3.5 (c) After "a free vertical drop of 1.4 kg", replace "through 1 m" by "from a height of 1 m".

[IAEA: 707]

2.7.2.3.3.7 In sub-paragraph (b), replace "with specimen" by "and the specimen". In sub-paragraph (e), replace "with the specimen" by "and the specimen".

[IAEA: 710]

2.7.2.3.3.8 In sub-paragraph (a), in (ii), replace "shall be heated" by "shall the be heated".

[IAEA: 711]

2.7.2.3.4.1 In sub-paragraph (a), replace "radiation level" by "dose rate".

[IAEA: 605]

2.7.2.3.5 In sub-paragraph (e), replace "limits provided in" by "the requirements of".

[IAEA: 417]

2.7.2.3.6 At the beginning, replace "A fissile material" by "Fissile material".

[IAEA: 606]

2.7.2.4.1.3 Add additional sub-paragraphs (e) and (f):

"(e) *Reserved*;

(f) If the package contains fissile material, one of the provisions of sub-paragraphs (a)–(f) of 2.7.2.3.5 shall apply."

[IAEA: 423]

2.7.2.4.1.4 Add additional sub-paragraph (c):

"(c) If the package contains fissile material, one of the provisions of subparagraphs (a) to (f) of 2.7.2.3.5 shall apply."

Add "and" at the end of existing (b) (ii).

[IAEA: 424]

2.7.2.4.1.7 Add additional sub-paragraph (e):

"(e) If the packaging has contained fissile material, one of the provisions of sub-paragraphs (a)–(f) of 2.7.2.3.5 or one of the provisions for exclusion in 2.7.1.3 shall apply.".

Transfer the "and" from the end of sub-paragraph (c) (ii) to the end of (d).

[IAEA: 427]

Chapter 4.1

4.1.9.1.4 Add at the end the following new sentence: "This requirement does not apply to the internal surfaces of freight containers being used as packagings, either loaded or empty."

[IAEA: 509]

4.1.9.1.8 Add additional sub-paragraph (e):

"(e) For packages intended to be used for shipment after storage, it shall be ensured that all packaging components and radioactive contents have been maintained during storage in a manner such that all the requirements specified in the relevant provisions of these Regulations and in the applicable certificates of approval have been fulfilled. "

[IAEA: 503]

4.1.9.2.4 In the introductory sentence, replace "and SCO-I" by ", SCO-I and SCO-III". Add the following new sub-paragraph (e):

"(e) For SCO-III:

(i) Transport shall be under exclusive use by road, rail, inland waterway or sea;

(ii) Stacking shall not be permitted;

(iii) All activities associated with the shipment, including radiation protection, emergency response and any special precautions or special administrative or operational controls that are to be employed during transport shall be described in a transport plan. The transport plan shall demonstrate that the overall level of safety in transport is at least equivalent to that which would be provided if the requirements of 6.4.7.14 (only for the test specified in 6.4.15.6, preceded by the tests specified in 6.4.15.2 and 6.4.15.3 had been met.

(iv) The requirements of 6.4.5.1 and 6.4.5.2 for a Type IP-2 package shall be satisfied, except that the maximum damage referred to in 6.4.15.4 may be determined based on provisions in the transport plan, and the requirements of6.4.15.5 are not applicable.

(v) The object and any shielding are secured to the conveyance in accordance with 6.4.2.1.

(vi) The shipment shall be subject to multilateral approval.".

[IAEA: 520]

Chapter 5.1

5.1.5.1.2 Add additional sub-paragraph (e):

"(e) The shipment of SCO-III.".

Transfer the "and" from the end of sub-paragraph (c) to the end of sub-paragraph (d).

[IAEA: 825]

5.1.5.1.4 (b) At the end, replace "in the hands" by "in the possession".

[IAEA: 558]

5.1.5.3.1 In the introductory sentence, replace "or SCO-I" by "SCO-I or SCO-III". In (a), replace "radiation level" by "dose rate" (twice) and replace "and SCO-I" by ", SCO-I or SCO-III". In (b) replace "and SCO-I" by ", SCO-I and SCO-III". At the end of (c), add "and the resulting number is the *TI* value (without unit).".

[IAEA: 523]

Table 5.1.5.3.1 In the title replace "and SCO-I" by ", SCO-I and SCO-III".

[IAEA: Table 7]

5.1.5.3.2 Amend to read as follows:

"The TI for each rigid overpack, freight container or conveyance shall be determined as the sum of the TIs of all the packages contained therein. For a shipment from a single consignor, the consignor may determine the TI by direct measurement of dose rate.

The TI for a non-rigid overpack shall be determined only as the sum of the TIs of all the packages within the overpack.".

[IAEA: 524and 524A]

5.1.5.3.4 In (b) replace "transport index" by "TI".

[IAEA: 529]

Chapter 5.2

5.2.1.5.6 Add the following sentence at the end:

"Any mark on the package made in accordance with the requirements of 5.2.1.5.4 (a) and (b) and 5.2.1.5.5 (c) relating to the package type that does not relate to the UN number and proper shipping name assigned to the consignment shall be removed or covered.".

[IAEA: 536A]

5.2.2.1.12.2 In (d), replace "(no transport index entry is required for category I-WHITE)" by "(except for category I-WHITE)".

[IAEA: 540]

Chapter 5.3

5.3.1.1.5.1 After "Large freight containers carrying" add "unpackaged LSA-I material or SCO-I or".

[IAEA: 543]

5.3.2.1.1 Replace "LSA-1 or SCO-1 material" by "LSA-I material, SCO-I or SCO-III".

[IAEA: 572]

Chapter 5.4

5.4.1.5.7.1 Amend sub-paragraphs (d) and (e) to read:

"(d) The category of the package, overpack or freight container, as assigned per paragraph 5.1.5.3.4, i.e. I-WHITE, II-YELLOW, III-YELLOW;

(e) The TI as determined per paragraphs 5.1.5.3.1 and 5.1.5.3.2 (except for category I-WHITE);".

In (j), replace "SCO-I and SCO-II" by "SCO-I, SCO-II and SCO-III".

[IAEA: 546]

5.4.2.2 Delete at the end of the first sentence:

"one to the other"

[IAEA: 552]

Chapter 6.4

6.4.2.4 Delete "and finished".

[IAEA: 610]

Insert a new 6.4.2.8 to read as follows:

"6.4.2.8 The design of the package shall take into account ageing mechanisms.".

In 6.4.2, renumber subsequent paragraphs accordingly.

[IAEA: 613A]

6.4.4 Amend to read as follows:

"An excepted package shall be designed to meet the requirements specified in 6.4.2.1-6.4.2.12 and, in addition, the requirements of 6.4.7.2 if it contains fissile material allowed by one of the provisions of sub-paragraphs (a)–(f) of 2.7.2.3.5, and the requirements of 6.4.3 if carried by air.".

[IAEA: 622]

6.4.5.4.3 Delete "liquids and gases" in first sentence. Replace "Table 4.1.9.2.4" by "Table 4.1.9.2.5".

[IAEA: 628]

6.4.6.2 Replace "it would meet" by "the package would meet" in the introductory sentence.

[IAEA: 632]

6.4.7.9 Replace "it shall be capable" by "the containment system shall be capable".

[IAEA: 643]

6.4.7.17 Amend to read as follows:

"A Type A package designed for gases shall prevent loss or dispersal of the radioactive contents if the package were subjected to the tests specified in 6.4.16, except for a Type A package designed for tritium gas or for noble gases."

[IAEA: 651]

6.4.8.2 Replace "Lessen the efficiency" by "Lessening of the efficiency".

[IAEA: 653]

6.4.8.8 In the first indent after the sub-paragraphs, replace "radiation level" by "dose rate". Add "none-fixed" before "contamination limits" in the last sentence.

[IAEA: 659]

6.4.9.1 Delete "Notwithstanding," at the beginning of the second sentence.

[IAEA: 667]

6.4.11.2 Replace "maximum mass" with "total mass" in sub-paragraph (c) (iv).

In sub-paragraph (d) replace "their total concentration" by "the total concentration of these materials".

[IAEA: 674]

6.4.11.8 In sub-paragraph (b) (i), after "between the valve" add "or the plug" and, at the end, after "the valves" add "and the plug".

[IAEA: 680]

6.4.11.11 Amend sub-paragraph (b) as follows:

"(b) In the assessment of 6.4.11.10, use of special features as specified in 6.4.11.8 is allowed provided that leakage of water into or out of the void spaces is prevented when the package is submitted to the Type C package tests specified in 6.4.20.1 followed by the water leakage test specified in 6.4.19.3."

[IAEA: 683]

6.4.12.1 Delete "LSA-III material, or" at the beginning of sub-paragraph (a).

[IAEA: 701]

6.4.13 Amend the introductory sentence to read as follows:

"After each test or group of tests or sequence of the applicable tests, as appropriate, specified in 6.4.15 to 6.4.21:"

[IAEA: 716]

6.4.15.4 In sub-paragraph (a), at the beginning, replace "of drop" by "of the drop," and add a comma after "of the target".

[IAEA: 722]

6.4.15.6 In sub-paragraph (b) replace "of drop" by "of the drop" and add commas before "measured" and after "of the specimen".

[IAEA: 724]

6.4.17.2 In sub-paragraph (b), in the third sentence, replace "section" by "cross-section".

[IAEA: 727]

6.4.17.3 In sub-paragraph (b), replace "are everywhere decreasing" by "are decreasing in all parts of the specimen".

[IAEA: 728]

After 6.4.23.2 Add new paragraph 6.4.23.2.1 to read as follows:

"6.4.23.2.1 An application for approval of SCO-III shipments shall include:

(a) A statement of the respects in which, and of the reasons why, the consignment is considered SCO-III;

(b) Justification for choosing SCO-III by demonstrating that:

(i) No suitable packaging currently exists;

(ii) Designing and/or constructing a packaging or segmenting the object is not practically, technically or economically feasible;

(iii) No other viable alternative exists;

(c) A detailed description of the proposed radioactive contents with reference to their physical and chemical states and the nature of the radiation emitted;

(d) A detailed statement of the design of the SCO-III, including complete engineering drawings and schedules of materials and methods of manufacture;

(e) All information necessary to satisfy the competent authority that the requirements of 4.1.9.2.4 (e) and the requirements of 7.1.8.2, if applicable, are satisfied;

(f) A transport plan;

(g) A specification of the applicable management system as required in 1.5.3.1.".

[IAEA: 827A]

6.4.23.4 Insert an additional sub-paragraph (f) to read as follows:

"(f) If the package is to be used for shipment after storage, a justification of considerations to ageing mechanisms in the safety analysis and within the proposed operating and maintenance instructions;".

Renumber subsequent sub-paragraphs accordingly.

Add additional sub-paragraph (k) to read as follows:

"(k) For packages which are to be used for shipment after storage, a gap analysis programme describing a systematic procedure for a periodic evaluation of changes of Regulations, changes in technical knowledge and changes of the state of the package design during storage."

[IAEA: 809]

6.4.23.8 (c) Replace "calculative methods" by "calculations".

[IAEA: 803]

6.4.23.10 Replace "International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources, Safety Series No.115, IAEA, Vienna (1996)" by "Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards, IAEA Safety Standards Series No. GSR Part 3, IAEA, Vienna (2014)" in sub-paragraph (h).

[IAEA: 817]

6.4.23.11 Delete sub-paragraph (d).

[IAEA: 832]

6.4.23.12 In (a), replace "6.4.23.11 (a), (b), (c) and (d)" by "6.4.23.11 (a), (b) and (c)" and delete "including, if applicable, the symbol "-96"". At the end of the first sentence of (a), replace "identification marks" by "identification mark".

[IAEA: 833]

6.4.23.15 Replace "contents" with "package" in sub-paragraph (k) (iii).

[IAEA: 836]

6.4.23.17 Replace "contents" with "package" in sub-paragraph (n) (iv).

Insert a new sub-paragraph (p) after 5.4.23.17 (o) and renumber subsequent sub-paragraphs accordingly:

"(p) For package designs subject to para. 6.4.24.2, a statement specifying those requirements of the current regulations with which the package does not conform;".

[IAEA: 838]

6.4.24 Amend the title over 6.4.24.1 to read "Packages not requiring competent authority approval of design under the 1985, 1985 (As Amended 1990), 1996 Edition, 1996 Edition (Revised), 1996 (As Amended 2003), 2005, 2009 Editions of IAEA Safety Series No. 6 and 2012 Edition of IAEA Safety Standards Serie No. SSR-6".

6.4.24.1 Amend to read as follows:

"*Packages* not requiring *competent authority approval* of *design* (*excepted packages, Type IP-1, Type IP-2, Type IP-3* and *Type A packages*) shall meet this Edition of these Regulations in full, except that:

(a) *Packages* that meet the requirements of the 1985 or 1985 (As Amended 1990) Editions of IAEA Regulations:

(i) May continue in transport provided that they were prepared for transport prior to 31 December 2003 and are subject to the requirements of 6.4.24.4, if applicable; or

(ii) May continue to be used, provided that all the following conditions are met:

- They were not designed to contain uranium hexafluoride;
- The applicable requirements of 1.5.3.1 of this Edition of these Regulations are applied;
- The activity limits and classification in Section IV of this Edition of these Regulations are applied;
- The requirements and controls for transport in Section V of this Edition of these Regulations are applied;

- The *packaging* was not manufactured or modified after 31 December 2003;

(b) *Packages* that meet the requirements of the 1996 Edition, 1996 Edition (Revised), 1996 (As Amended 2003), 2005, 2009 or 2012 Editions of these Regulations:

(i) May continue in transport provided that they were prepared for transport prior to 31 December 2025 and are subject to the requirements of 6.4.24.4, if applicable; or

(ii) May continue to be used, provided that all the following conditions are met:

- The applicable requirements of 1.5.3.1 of this Edition of these Regulations are applied;

- The activity limits and classification in Section IV of this Edition of these Regulations are applied;

- The requirements and controls for transport in Section V of this Edition of these Regulations are applied; and

- The *packaging* was not manufactured or modified after 31 December 2025.".

[IAEA 819]

Amend the title over 6.4.24.2 to read: "Package designs approved under the 1985, 1985 (As Amended 1990), 1996 Edition, 1996 Edition (Revised), 1996 (As Amended 2003), 2005, 2009 Editions of IAEA Safety Series No. 6 and 2012 Edition of IAEA Safety Standards Serie No. SSR-6".

6.4.24.2 Amend to read as follows:

"Packages requiring competent authority approval of the design shall meet this Edition of these Regulations in full except that:

(a) Packagings that were manufactured to a package design approved by the competent authority under the provisions of 1985 or 1985 (As Amended 1990) Editions of IAEA Regulations may continue to be used provided that all of the following conditions are met:

(i) The package design is subject to multilateral approval;

(ii) The applicable requirements of 1.5.3.1 of this Edition of these Regulations are applied;

(iii) The activity limits and classification in Section IV of this Edition of these Regulations are applied;

(iv) The requirements and controls for transport in Section V of this Edition of these Regulations are applied;

(v) For a package containing fissile material and transported by air, the requirement of 6.4.11.11 is met;

(b) Packagings that were manufactured to a package design approved by the competent authority under the provisions of the 1996 Edition, 1996 Edition (Revised), 1996 (As Amended 2003), 2005, 2009 and 2012 Editions of these Regulations may continue to be used provided that all of the following conditions are met:

(i) The package design is subject to multilateral approval after 31 December 2025;

(ii) The applicable requirements of 1.5.3.1 of this Edition of the Regulations are applied;

(iii) The activity limits and material restrictions of Section IV of this Edition of these Regulations are applied;

(iv) The requirements and controls for transport in Section V of this Edition of these Regulations are applied.".

[IAEA 820]

After 6.4.24.3 Add new 6.4.24.4 to read as follows:

"6.4.24.4 No new manufacture of *packaging* of a *package design* meeting the provisions of the 1996 Edition, 1996 Edition (Revised), 1996 (As Amended 2003), 2005, 2009 and 2012 Editions of these Regulations shall be permitted to commence after 31 December 2028.".

Renumber 6.4.24.4 and 6.4.24.5 as 6.4.24.5 and 6.4.24.6.

[IAEA 821A]

Amend the title over 6.4.24.6 (previously 6.4.24.5) to read: "Special form radioactive material approved under the 1985, 1985 (As Amended 1990), 1996 Edition, 1996 Edition (Revised), 1996 (As Amended 2003), 2005, 2009 Editions of IAEA Safety Series No. 6 and 2012 Edition of IAEA Safety Standards Serie No. SSR-6".

6.4.24.6 (previously 6.4.24.5) Amend to read as follows:

"6.4.24.6 Special form radioactive material manufactured to a design that had received unilateral approval by the competent authority under the 1985, 1985 (As Amended 1990), 1996 Edition, 1996 Edition (Revised), 1996 (As Amended 2003), 2005, 2009 and 2012 Editions of IAEA Regulations may continue to be used when in compliance with the mandatory management system in accordance with the applicable requirements of 1.5.3.1 . There shall be no new manufacture of special form radioactive material to a design that had received unilateral approval by the competent authority under the 1985 or 1985 (As Amended 1990) Editions of these Regulations. No new manufacture of special form radioactive material to a design that had received unilateral approval by the competent authority under the 1996 Edition, 1996 Edition (Revised), 1996 (As Amended 2003), 2005, 2009 and 2012 Editions of these Regulations shall be permitted to commence after 31 December 2025.".

[IAEA 823]

Chapter 7.1

7.1.8.2 Add the following new sentence after the first sentence:

"For SCO-III, the limits in Table 7.1.8.2 may be exceeded provided that the transport plan contains precautions which are to be employed during transport to obtain an overall level of safety at least equivalent to that which would be provided if the limits had been applied.".

[IAEA 522]

7.1.8.3.3 Amend sub-paragraph (b) to read as follows:

"(b) The dose rate under routine conditions of transport shall not exceed 2 mSv/h at any point on the external surface of the vehicle or freight container, and 0.1 mSv/h at 2 m from the external surface of the vehicle or freight container, except for consignments transported under exclusive use by road or rail for which the radiation limits around the vehicle are set forth in 7.2.3.1.2(b) and (c)."

[IAEA: 566]

7.1.8.5.5 At the beginning, delete ", tank, intermediate bulk container".

[IAEA: 514]

Chapter 7.2

7.2.3.1.1 In the introductory sentence, replace "consignments under exclusive use" by "unpackaged LSA-I material, SCO-I or SCO-III".

[IAEA: 571]